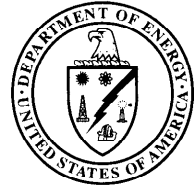


DOE/ID-10973
December 2001



U.S. Department of Energy
Idaho Operations Office

FY 2001 Institutional Control Inspection Report for the Central Facilities Area, Operable Unit 4-13



Idaho National Engineering and Environmental Laboratory

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Published December 2001

Prepared for the
U.S. Department of Energy
Idaho Operations Office

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**DOE/ID-10973
Revision 0**

December 2001

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ABSTRACT

This Institutional Control Inspection Report provides and documents the inspection of the Record of Decision-mandated institutional controls for the Central Facilities Area sites under Operable Unit 4-13 at the Idaho National Engineering and Environmental Laboratory. Inspection of institutional controls is required by the Operable Unit 4-13 Record of Decision to be conducted and reported within six months of signature of the Record of Decision and annually thereafter. The six month annual inspection was reported in *Status of Operable Unit 4-13 Comprehensive Record of Decision Institutional Controls Sites and Final Documentation for No Action Sites* (DOE/ID-10830). This report fulfills the requirement for the first annual inspection.

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ACRONYMS

CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFA	Central Facilities Area
CFLUP	Comprehensive Facility and Land Use Plan
DOE-ID	Department of Energy Idaho Operations Office
EPA	Environmental Protection Agency
FY	fiscal year
IC	institutional control
INEEL	Idaho National Engineering and Environmental Laboratory
NRTS	National Reactor Testing Station
OU	operable unit
ROD	Record of Decision
WAG	waste area group

FY 2001 Institutional Controls Annual Monitoring Report for the Central Facilities Area, Operable Unit 4-13

1. INTRODUCTION

The purpose of this Institutional Controls Monitoring Report is to document the fiscal year (FY) 2001 annual institutional controls status inspection conducted for the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) sites in Waste Area Group (WAG) 4, Operable Unit (OU) 4-13 at the Idaho National Engineering and Environmental Laboratory (INEEL).

This report documents the status of institutional controls at the five WAG 4 institutionally controlled sites, Central Facilities Area (CFA)-01 (CFA Landfill I), CFA-02 (CFA Landfill II), CFA-03 (CFA Landfill III), CFA-07 (French Drains), and CFA-08 (Sewage Plant Drainfield). It includes photographs of institutional controls at these sites. It does not include an approved inspection form since this form is under development in the recently drafted Operations and Maintenance Plan, which has been submitted for Agency review with the CFA-08 Remedial Design/Remedial Action (RD/RA) Work Plan.

This report also documents the removal of signs from the 45 OU 4-13 no action sites and one recently remediated site (CFA-10 Transformer Yard) that does not require institutional controls.

In addition, this report includes documentation of the status of signs and fencing at one OU 4-13 site (CFA-04 mercury pond), which will be remediated within the next three years. This site does not require institutional controls (ICs) per the Record of Decision (ROD). As with any other CERCLA site, signs will be maintained and access will be controlled until the site is remediated. After remediation, it is not anticipated that this site will require ICs.

2. BACKGROUND

2.1 INEEL/CFA Background

The INEEL is a government-owned/contractor-operated facility managed by the DOE-ID that is located 51 km (32 mi) west of Idaho Falls, Idaho (see Figure 2-1). The INEEL encompasses portions of five Idaho counties: (1) Butte, (2) Jefferson, (3) Bonneville, (4) Clark, and (5) Bingham, occupying 2,305 km² (890 mi²) of the northeastern portion of the Eastern Snake River Plain (see Figure 2-1).

The INEEL was established in 1949 as the National Reactor Testing Station (NRTS), a United States Atomic Energy Commission-managed reservation. Historically, the NRTS was devoted to energy research and related activities. In 1974, the NRTS was redesignated the Idaho National Engineering Laboratory to reflect the broad scope of engineering activities that were being conducted. In 1997, the Idaho National Engineering Laboratory was renamed the INEEL to reflect the emphasis on environmental research.

The CFA (location of WAG 4 sites), is located at the INEEL as shown in Figure 2-1. The CFA includes buildings built in the 1940s and 1950s to house Navy gunnery range personnel, administration offices, shop, and warehouse space. The facilities have been modified over the years to fit changing needs. Presently, the CFA houses approximately 1,000 people and provides four major types of functional space: crafts, administrative offices, maintenance services, and a laboratory.

Based upon the OU 4-13 Record of Decision (ROD), remedies for 52 sites were evaluated under the Comprehensive Remedial Investigation /Feasibility Study (RI/FS). Of these 52 sites, the ROD requires current institutional controls at 5 sites, the CFA-01, CFA-02, and CFA-03 Landfills, the CFA-07 French Drains, and the CFA-08 Sewage Plant Drainfield. One of these sites, CFA-08 Sewage Plant Drainfield, and two other sites require remedial action per the ROD. One site, the CFA-10 Transformer Yard was remediated in FY2001 to below the EPA residential screening level of 400 mg/kg for lead and does not require institutional controls. The other site, the CFA-04 mercury pond, will be remediated within the next 3 years and does not currently require institutional controls and is not anticipated to require ICs in the future. As with any other CERCLA site, signs will be maintained and access will be controlled until the site is remediated.

Rationale for the need of institutional controls at the five sites varies. The CFA-01, CFA-02, and CFA-03 Landfills were capped with a native soil cover per the OU 4-12 ROD and require continuing institutional controls to maintain the integrity of the cover. The CFA-07 French Drains were removed in a nontime critical removal action and require institutional controls to protect use against the potential for radioactivity and lead beneath the removal action site at depths greater than 2.4 - 3 m (8 -10 ft). The CFA-08 Sewage Plant Drainfield will receive a native soil cover to limit exposure to cesium-137 contamination and requires ICs prior to and after remediation to limit occupational and residential access respectively. Figure 2-2 shows the location of these five WAG 4 sites that require institutional controls.

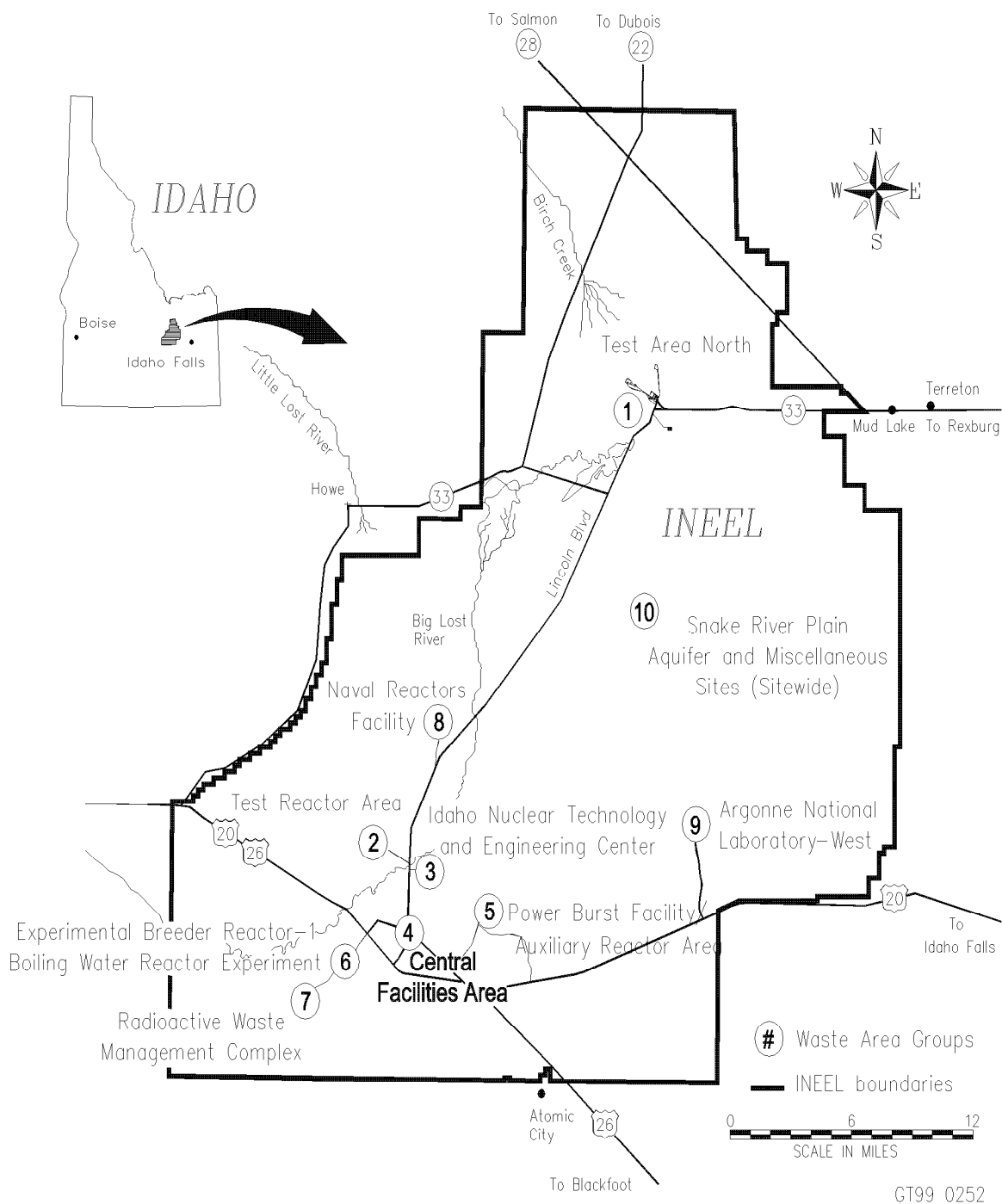


Figure 2-1. The Idaho National Engineering and Environmental Laboratory.

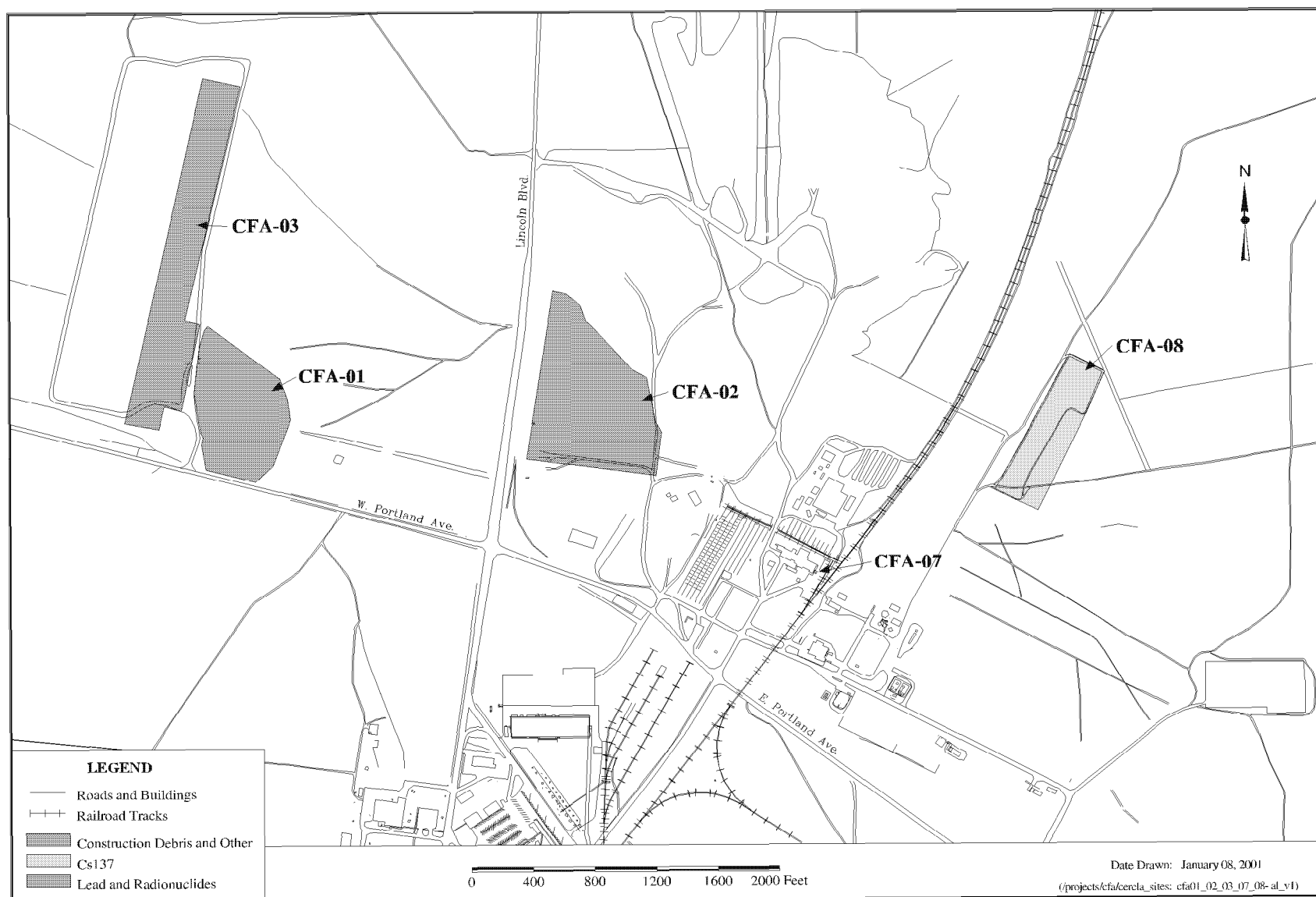


Figure 2-2. Location of WAG 4 institutional control sites at CFA as identified by WAG 4 OU 4-13 Comprehensive ROD.

Inclusion of institutional controls for these sites is consistent with the *EPA Region 10 Policy on the Use of Institutional Controls at Federal Facilities* (EPA 1999) and with the requirement under CERCLA that, when waste is left in place above levels that allow for unlimited use, appropriate controls must be in place to limit exposure and achieve acceptable levels of risk.

2.2 INEEL Comprehensive Facility and Land Use Plan

The INEEL Comprehensive Facility and Land Use Plan (DOE-ID 1996) (CFLUP) documents and displays current and anticipated future land use and facility use at the INEEL. It provides guidance on facility and land use at the INEEL through the 100-year scenario, which will be explained below. The CFLUP is updated, as needed, when information, such as land use, changes and includes specific land use information about the CFA facility.

Land use projections in the INEEL CFLUP incorporate the assumption that the INEEL will remain under government management and control for at least the next 100 years. A mix of land uses across the INEEL is anticipated to include unrestricted industrial uses, government-controlled industrial uses, unrestricted areas, controlled areas for wildlife management and conservation, and waste management areas. No residential development will be allowed within INEEL boundaries, and no new major private developments (residential or nonresidential) on public lands are expected in areas adjacent to the Site. Grazing will be allowed to continue in the buffer area.

The survey data, pictures, and institutional control requirements for the five OU 4-13 CERCLA sites have been recorded and submitted for incorporation into the CFLUP. Copies of this information are included in Appendix A (some of this information, i.e., the location coordinates, may never be accessible to the public through the internet).

3. INSPECTION

The first WAG 4 annual inspection was performed on October 17, 2001. All five WAG 4 sites with institutional controls and one WAG 4 site to be remediated, CFA-04 mercury pond, were visited. The WAG 4 project engineer and the WAG 4 task lead performed the inspection. No problems were found. Pictures of the signs and fences at these 6 sites are included in Appendix B.

3.1 FY 2001 Maintenance Activities

Maintenance activities at the WAG 4 CERCLA sites for FY 2001 consisted of removing the old signs from all sites and posting new orange institutional control signs at the five IC sites and green CERCLA signs at the to-be-remediated CFA-04 mercury pond. They indicate the contaminant of concern, access requirements, a central telephone number, waste handling concerns, and a map locating the site. Photographs of these signs are located in Appendix B.

3.2 FY 2002 Maintenance Activities

No actions were identified by this inspection for FY 2002.

4. INSTITUTIONAL CONTROLS

Access to the INEEL and specifically to CFA is controlled through the main security gate. Security personnel at the INEEL require physical observation of badges to access the area.

The individual institutional controls that were maintained and verified at each of the five IC sites are listed in Table 4-1.

4.1 Removal of Signs at Sites Not Requiring Institutional Controls

The 45 no action sites that did not require institutional control, as specified in the OU 4-13 ROD, were surveyed, photographed, and documented in the *Status of Operable Unit 4-13 Comprehensive Record of Decision Institutional Controls Sites and Final Documentation for No Action Sites* (DOE-ID 2000a). The signs were then removed from all these CFA no action sites.

In addition, the signs were removed from the CFA-10 Transformer Yard since it was remediated in FY 2001 to levels below EPA residential screening levels for lead.

A listing of all the CFA sites where signs have been removed is included in Table 4-2.

Table 4-2. List of WAG 4 sites where all signs have been removed.

Operable Unit	Site Code	Site Name
4-01	CFA-09	Central Gravel Pit
	CFA-11	French Drain (containing a 5-in. shell north of CFA-633)
4-02	CFA-13	Dry Well (south of CFA-640)
	CFA-14	Two Dry Wells (CFA-665)
	CFA-15	Dry Well (CFA-674)
	CFA-16	Dry Well (south of CFA-682 pumphouse)
4-03	CFA-18	Fire Department Training Area, Oil Storage Tanks
	CFA-19	Gasoline Tanks (2) east of CFA-606
	CFA-20	Fuel Oil Tank at CFA-609 (CFA-732)
	CFA-21	Fuel Tank at Nevada Circle 1 (south by CFA-629)
	CFA-22	Fuel Oil at CFA-640
	CFA-23	Fuel Oil Tank at CFA-641
	CFA-24	Fuel Tank at Nevada Circle 2 (south by CFA-629)
	CFA-25	Fuel Oil Tank at CFA-656 (north side)
	CFA-27	Fuel Oil Tank at CFA-669 (CFA-740)
	CFA-28	Fuel Oil Tank at CFA-674 (west)
	CFA-29	Waste Oil Tank at CFA-664
	CFA-30	Waste Oil Tank at CFA-665, active
	CFA-31	Waste Oil Tank at CFA-754, active
	CFA-32	Fuel Tank at CFA-667 (north side)
	CFA-33	Fuel Tank at CFA-667 (south side)
	CFA-34	Diesel Tank at CFA-674 (south)
	CFA-35	Sulfuric Acid Tank at CFA-674 (west side)
	CFA-36	Gasoline Tank at CFA-680
	CFA-37	Diesel Tank at CFA-681 (south side)
	CFA-38	Fuel Oil Tank, CFA-683
	CFA-45	Underground Storage Tank
4-04	CFA-39	Drum Dock (CFA-771)
	CFA-40	Returnable Drum Storage—south of CFA-601
	CFA-41	Excess Drum Storage—south of CFA-674

Table 4.2. (continued).

Operable Unit	Site Code	Site Name
4-05	CFA-17	Fire Department Training Area, bermed
	CFA-47	Fire Station Chemical Disposal
	CFA-50	Shallow Well east of CFA-654
4-06	CFA-06	Lead Shop (outside areas)
	CFA-43	Lead Storage Area
	CFA-44	Spray Paint Booth Drain
4-07	CFA-12	French Drains (2) (CFA-690)
	CFA-48	Chemical Washout south of CFA-633
4-08	CFA-08 ^b	Sewage Plant ^b
		Pipeline ^b
	CFA-49	Hot Laundry Drain Pipe
4-09	CFA-10 ^a	Transformer Yard
	CFA-26	CFA-760 Pump Station Fuel Spill
	CFA-42	Tank Farm Pump Station Fuel Spills
	CFA-46	Cafeteria Oil Tank Spill (CFA-721)
4-11	CFA-05	Motor Pool Pond
4-13	CFA-51	Drywell at north end of CFA-640
	CFA-52	Diesel Fuel Underground Storage Tank (UST) (CFA-730) at Bldg. CFA-613 Bunkhouse

a. Signs were removed from this site because it was remediated to below EPA residential screening levels for lead in FY 2001.

b. The Sewage Plant Drainfield portion of this site will continue to have IC signs.

5. CONCLUSION

The annual institutional controls inspection required by the OU 4-13 ROD was performed and documented. No deficiencies were noted.

6. REFERENCES

- 42 USC § 9601 et seq., 1980, “Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA/Superfund),” *United States Code*, December 1980.
- DOE-ID, 1996, *INEEL Comprehensive Facility and Land Use Plan*, Department of Energy Idaho Operations Office, DOE/ID-10514, Revision 0, March 1996.
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- DOE-ID, 2000b, *Final Comprehensive Record of Decision for Central Facilities Area Operable Unit 4-13*, Department of Energy Idaho Operations Office, DOE/ID-10719, Revision 2, July 2000.
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- EPA, 2000, *Institutional Controls: A Site Manager’s Guide to Identifying, Evaluating, and Selecting Institutional Controls at Supervened and RCRA Corrective Action Cleanups*, U.S Environmental Protection Agency, September 2000.